

Requirements for Electrical Drawings

GENERAL

- Have all new work differentiated from existing work
- Drawings need to be at least 1/8" scale or larger
- Indicate locations of all wet and hazardous locations
- All drawings need to be neat and legible and all of the same size
- Make sure all spaces and rooms are labeled as to their use

TITLE BLOCK

- Project name and address
- Designers name and address
- Designer's telephone number
- Designer's seal and signature or master card number and signature
- Show page numbers

SERVICE DETAILS

- Show location of meter and CT cabinet on floor plans
- Show location of service equipment
- Size service conductors, raceways; specify raceway type
- Indicate AIC rating of service equipment and all panelboards
- Show all fuse and breaker sizes
- Indicate amperage, voltage and phase of service equipment

GROUNDING DETAILS FOR SERVICES

- Show grounding electrode system and details
- Size all grounding conductors

PANELBOARDS

- Provide panelboard schedule with connected loads and breaker sizes
- Indicate if panelboards are main lug or main breaker type
- Indicate AIC rating
- Indicate panelboards, voltage, phase, rating in amps and name of panel

FEEDERS

- Show wire size and type
- Show conduit size and type
- Show feeder loads
- Indicate size of equipment grounding conductor

BRANCH CIRCUIT DETAILS

- Designate all branch circuits serving power, lighting and equipment
- Show all wiring sizes, Conduit sizes and number of conductors

TRANSFORMERS

- Indicate size in KVA
- Indicate primary and secondary voltages
- Show over current protection
- Show location of transformer on drawing
- Indicate size of grounding electrode conductor

DISCONNECTS AND STARTERS

- Show location of all disconnects and starter on plans
- Show size and type; fused or nonfused
- Indicate fuse size
- Show location of all electrical equipment on plans
- Show loads of equipment on panel schedules

EGRESS AND EXIT LIGHTS

- Show location of all exit and egress lights on plans
- Indicate lighting circuit that they are supplied from
- Show breaker lock on panel schedule if using the exception in Article 700

DEMAND LOAD SUMMARY SHEET

- Show connected loads of new and existing electrical system
- Indicate NEC demand loads per Article 220
- Indicate if demand loads are being calculated from the standard or optional methods